

1

POLE CLIMBING FALL PREVENTION ASSEMBLY

CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims priority to U.S. Provisional Application Ser. No. 61/311,318, titled "Pole Grabber (Restricting Belt/Pole Climbing Fall Protection System) With Adjustable Pole Strap Dee Ring," filed on Mar. 6, 2010 and U.S. Provisional Application Ser. No. 61/382,565, titled "Pole Choker Assembly," filed on Sep. 14, 2010, both of which are incorporated in their entirety herein by reference.

BACKGROUND

Fall protection equipment is commonly utilized to prevent injuries to workers who need to climb poles to install and repair equipment. Such fall protection equipment typically includes a safety harness donned by the worker and safety equipment, such as a pole choker assembly, connecting the safety harness and the pole. The safety equipment allows the worker to climb up and down the pole while preventing the worker from falling to the ground if a fall event occurs.

For the reasons stated above and for other reasons stated below which will become apparent to those skilled in the art upon reading and understanding the present specification, there is a need in the art for an efficient and effective fall prevention assembly.

SUMMARY OF INVENTION

The above-mentioned problems of current systems are addressed by embodiments of the present invention and will be understood by reading and studying the following specification. The following summary is made by way of example and not by way of limitation. It is merely provided to aid the reader in understanding some of the aspects of the invention.

In one embodiment, a fall prevention assembly is provided. The fall prevention assembly includes a pole strap, a first connector, a floating back plate, a second connector, a lanyard and an engaging sleeve. The pole strap has a first end, a second end and a mid-portion between the first end and the second end. The first connector has a first end that is slidably coupled proximate the first end of the pole strap. The floating back plate is engaged between a portion of the first connector and the pole strap. The floating back plate is configured and arranged to selectively bind the pole strap to the first connector in a static position. The second connector is coupled proximate the second end of the pole strap. The lanyard has a first end, a second end and mid-portion between the first and second ends. A second end of the first connector is slidably coupled to the lanyard. A second end of the second connector is slidably coupled to the lanyard, such that the mid-portion of the pole strap and the mid-portion of the lanyard can be positioned around a pole to be climbed. In addition, the engaging sleeve is received around the mid-portion of the lanyard to engage the pole to be climbed.

In another embodiment, another fall prevention assembly is provided. This fall prevention assembly includes first and second elongated members, first and second connectors and a rope grab. The first elongated member has a first end, a second end and mid portion between the first and second ends. The first elongated member is configured to be positioned around an outside portion of a pole to be climbed in relation to a user of the fall prevention assembly. The second elongated member has a first end, a second end and a mid portion between the

2

first and second ends. The second elongated member is configured to be positioned around an inside portion of the pole to be climbed in relation to the user of the fall prevention assembly. The second end of the second elongated member is configured and arranged to be selectively coupled to a safety harness of the user. The first connector has a first portion that is selectively sideably coupled to the first elongated member and a second portion that is sideably coupled to the second elongated member. The second connector has a first portion coupled a select distance from the second end of the first elongated member and a second portion coupled to the second elongated member such that the first and second connectors couple the first and second elongated members around the pole. The rope grab is engaged with the second elongated member. The rope grab is configured and arranged to be selectively coupled to the safety harness of the user.

In still another embodiment, an adjustment assembly is provided. The adjustment assembly includes a sliding adjustment member and a floating back plate. The sliding adjustment member includes a first post, a second post, a first side plate, a second side plate and a connecting head. The first post and the second post extend between the first plate and the second plate in a spaced fashion such that the passage is formed by the first post, the second post, the first side plate and the second side plate. The connecting head extends from the second post. The floating back plate is configured and arranged to be received in the passage of the sliding adjustment member and to engage the first post to selectively bind a strap also passing through the passage of the sliding adjustment member.

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention can be more easily understood and further advantages and uses thereof will be more readily apparent, when considered in view of the detailed description and the following figures in which:

FIG. 1A is a first side perspective view of a fall prevention assembly of one embodiment of the present invention;

FIG. 1B is a second side perspective view of the fall prevention assembly of FIG. 1A;

FIG. 1C is a first side perspective view of the fall prevention assembly of FIG. 1A with the pole strap disconnected from the lanyard;

FIG. 2A is a first side view of the fall prevention assembly of FIG. 1A;

FIG. 2B is a close up view of a portion of the fall prevention assembly of FIG. 2B;

FIG. 3A is a top view of a pole strap of one embodiment of the present invention;

FIG. 3B is a side view of the pole strap of FIG. 3A;

FIG. 3C is a side perspective view of the pole strap of FIG. 3A;

FIG. 3D is a side perspective exploded view of the pole strap of FIG. 3A;

FIG. 4A is a side perspective view of a slide engaging member of one embodiment of the present invention;

FIGS. 4B through 4E are illustrations of another embodiment of a slide engaging member;

FIG. 4F is an illustration of yet another embodiment of a slide engaging member;

FIG. 5A is a top view of a floating back plate of one embodiment of the present invention;

FIG. 5B is a side view of the floating back plate of FIG. 5A;

FIG. 5C is a bottom view of the floating back plate of FIG. 5A;